

CLAIMS:

1. A control system for use with an electronic gaming device, the control system comprising:
control means including:
5 digital processing means;
memory means;
storage means;
one or more sets of game information, each comprising program means and/or data means, each set of game information representing a component
10 required by the processing means to run a game on the gaming device, and being stored in the storage means;
input/output means;
data authentication means to authenticate a set of game information stored in the storage means, the authentication means being arranged to
15 operate under the control of any one of a plurality of sets of authentication rules and being arranged to receive one of the sets of authentication rules when authentication is initiated, and to use the received rules to perform the authentication;
the gaming device being operated by one of the program means when
20 the respective program means is loaded in to the memory means;
means for receiving power; and
means for supplying power to the control system, the means for supplying power in electrical communication with the means for receiving power.
- 25 2. The control system as described in Claim 1, wherein the data authentication means is arranged to be initiated by an authorized third party instructor and to receive one of the sets of authentication rules from the authorized third party instructor when authentication is initiated.
- 30 3. The control system as described in Claim 1, wherein, as well as the data authentication means, a data validation means is provided to validate a set of game information every time the respective set of game information is loaded from the storage means to the memory means.
4. The control system as described in Claim 1, wherein, the data
35 validation means includes CRC checking means to perform a CRC calculation on the set of gaming information and to compare a calculated CRC value with a CRC value stored with the respective set of game

information.

5. The control system as described in Claim 1, wherein each program means and each data means includes an identification means, such that each program means and each data means is uniquely identified.

5 6. The control system as described in Claim 5, wherein the control means further comprise a means for controlling one or more peripheral devices.

7. The control system as described in Claim 6, further comprising a second means for controlling one or more peripheral devices, the second means for controlling peripheral devices in communication with the control means.

8. The control system as described in Claim 6, wherein the first means for controlling peripheral devices is an Input/Output Control Board (IOCB).

9. The control system as described in Claim 8, further comprising a non-volatile memory as the storage means.

10. The control system as described in Claim 9, wherein the storage means is chosen from the group consisting of a ROM, PROM, EPROM or EEPROM.

11. The control system as described in Claim 10, wherein the verification method further includes a method for grouping the program means that are related, and for grouping the data means that are related, the method for grouping emulating a method of grouping employed in storage media.

12. The control system as described in Claim 11, wherein the storage media whose grouping method is emulated is chosen from the group of storage media consisting of ROM, PROM, EPROM or EEPROM.

13. The control system as described in Claim 12, wherein the verification method further includes a method of abstracting the location of the program means, the data means and the storage means.

14. The control system as described in Claim 13, wherein the verification means further includes means to compare the identification means of the requested program means or of the requested data means to the established identification means.

15. The control system as described in Claim 14, wherein the verification means further includes a means for of controlling the operation of the gaming device in response to the verification of integrity of the program means or the data means.

16. The control system as described in Claim 15, wherein the means for
controlling includes a means of halting the verification means if the
identification means of the requested program means or the requested data
means does not match the established identification means of the program
5 means or the data means.
17. The control system as described in Claim 10, wherein the verification
means further includes a means to authenticate the retrieved program means
or the retrieved data means.
18. The control system as described in Claim 17, wherein the control
10 means effects the means to authenticate only after the integrity of the
requested program means or the integrity of the requested data means has
been verified.
19. The control system as described in Claim 1, wherein the verification
means for verifying the integrity of the program means and the data means
15 further includes means to authentication means, for authenticating the
program means and the data means, the authentication means being
activated in response to signals received from a requesting means.
20. The control system as described in Claim 18, wherein the requesting
means is an authentication agent.
21. The control system as described in Claim 16, wherein the
20 authentication agent is external to the control system and the gaming device,
the authentication agent being in communication with the control means.
22. The control system as described in Claim 16, wherein an
authentication agent is external to the control system and is within the
25 gaming device, the authentication agent being in communication with the
control means.
23. The control system as described in Claim 17 or Claim 18, wherein the
authentication method further includes a method for registering the
authentication agents.
24. The control system as described in Claim 18, wherein the signal
30 received from the requesting means is an authentication request.
25. The control system as described in Claim 1, wherein the control
means further includes a means for receiving the authentication requests.
26. The control system as described in Claim 1, wherein the
35 authentication requests includes a signal to prioritize the authentication
request.

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27. The control system as described in Claim 23, wherein the control means further includes a means of queueing the authentication requests, when more than one authentication request has been sent from the authentication agents.

5 28. The control system as described in Claim 24, wherein the control means further include a means of interpreting the authentication request.

29. The control system as described in Claim 25, wherein the means of interpreting the authentication request includes a means of generating an authentication identification (id) of the requested program means or data means.

10 30. The control system as described in Claim 26, wherein the control system further includes a responder means, the responder means being external to the control means and in electronic communication with the control means.

15 31. The control system as described in Claim 27, wherein the control means further includes a presenter means, the presenter means communicating the generated authentication id to the responder means.

32. The control system as described in Claim 28, wherein the control means and the responder means include a means for determining if the generated authentication id is authentic, the responder means comparing the generated authentication id to the request, the generated authentication id deemed authentic if the generated authentication id matches the request.

20 33. The control system as described in Claim 32, wherein the generated authentication id is deemed not authentic if the generated authentication id does not match the request.

34. The control system as described in Claim 22 and 33, wherein the control means further includes a means of controlling the operation of the gaming device in response to the determination of authenticity of the requested program means or the requested data means.

30 35. The control system as described in Claim 34, wherein the controlling means includes means of halting the operation of the gaming device if the requested program means or the requested data means is deemed not authentic.

35 36. The control system as described in Claim 34, wherein the controlling means includes means of continuing the operation of the gaming device if the requested program means or the requested data means is deemed

authentic.

37. The control system as described in Claim 12, wherein the storage means is a hard disk drive unit.

38. The control system as described in Claim 12, wherein the storage
5 means is a CD-ROM unit.

39. The control system as described in Claim 12, wherein the storage means is a DVD unit.

40. The control system as described in Claim 12, wherein the storage means is a file server.

10 41. For use in an electronic gaming device, a method to verify the integrity of program means and the integrity of data means stored in a control system, the control system comprising:

control means in electronic communication with the gaming device, the control means including;

15 digital processing means ;

memory means;

storage means;

one or more sets of game information, each comprising program means and/or data means, each set of game information representing a component
20 required by the processing means to run a game on the gaming device, and being stored in the storage means;

input/output means;

means for receiving power; and

25 means for supplying power to the control system, the means for supplying power in electrical communication with the means for receiving power, the verification method comprising the steps of:

sending a request from a requesting means to the control system;

processing the request within the control system;

30 retrieving a requested program means or a requested data means from the storage means;

verifying the integrity of the requested program means or the requested data means by verification means which verify by comparing the identification means of the requested program means or the requested data means with the request, the integrity verified if the identification means

35 matches the established identification means request; and

controlling the operation of the gaming device in response to the

verification of integrity of the requested program means or the requested data means.

42. The method as described in Claim 41, further comprising the steps of halting the verification method of the identification means if the requested
5 program means or the requested data means does not match the established identification means of the program means or the data means.

43. The method as described in Claim 42, further comprising a method to authenticate the retrieved program means or the retrieved data means.

44. The method as described in Claim 43, wherein the method to
10 authenticate is effected only after the integrity of the requested program means or the integrity of the requested data means has been verified.

45. The method as described in Claim 44, wherein the requesting means is an authentication agent.

46. The method as described in Claim 43, wherein the method further
15 includes a method for registering the authentication agent.

47. The method as described in Claim 46, wherein the request includes a verification request and an authentication request.

48. The method as described in Claim 47, wherein the request further includes an authentication queuing request.

49. The method as described in Claim 48, wherein the request further
20 includes registration means for the authentication agent.

50. The method as described in Claim 46, further including a method of abstracting the location of the program means, the data means, and the storage means.

51. The method as described in Claim 50, further including the step
25 determining which of the program means are related, and determining which of the data means are related.

52. The method as described in Claim 51, further including the step of grouping the related program means, and grouping the related data means.

53. The method as described in Claim 52, wherein the grouping step
30 emulates a method of grouping employed in storage media chosen from the group consisting of ROM, PROM, EPROM or EEPROM.

54. The authentication method as described in Claim 53, wherein the control means further includes a means for queuing the authentication
35 requests.

55. The authentication method as described in Claim 54, further

comprising the step of queuing the authentication requests, when more than one authentication request has been sent from the authentication agents.

56. The authentication method as described in Claim 49, wherein the control means further includes a means of interpreting the authentication request.

57. The authentication method as described in Claim 56, further comprising the step of interpreting the authentication request.

58. The authentication method as described in Claim 57, wherein the interpretation step includes the step of generating an authentication identification (id).

59. The authentication method as described in Claim 58, wherein the control means further includes a presenter means, the presenter means communicating the generated authentication id to a responder means.

60. The authenticating method as described in Claim 59, further comprising the step of determining if the generated authentication id is authentic, the responder means and the control means comparing the generated authentication id to the request, the generated authentication id deemed authentic if the generated authentication id matches the request.

61. The authentication method as described in Claim 60, wherein the generated authentication id is deemed not authentic if the generated authentication id does not match the request.

62. The authentication method as described in Claim 60 or 61, further including the step of controlling the operation of the gaming device in response to the determination of authenticity of the requested program means or the requested data means.

63. The method as described in Claim 62, wherein the controlling step includes halting the operation of the gaming device if the requested program means or the requested data means is determined to be not authentic.

64. The method as described in Claim 62, wherein the controlling step includes continuing the operation of the gaming device if the requested program means or the requested data means is determined to be authentic.